

**Notice of Allowability**

Application No.

10/614,945

Examiner

Eric Woods

Applicant(s)

LU, SHUIJUN

Art Unit

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview 6/14/06.
2. ☒ The allowed claim(s) is/are 4-6.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's amendments to the claimed, as done by examiner's amendment below, obviate all previous grounds of rejection against the claims.

As such, all statutory grounds of rejection stand withdrawn, and the filing of the terminal disclaimer obviates the double patenting rejections against the remaining claims.

### ***Terminal Disclaimer***

The terminal disclaimer filed on 13 June 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US patent 6,876,366 has been reviewed and is accepted. The terminal disclaimer has been recorded.

## **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with David Hsia (46,235) on 14 June 2006.

In the claims:

- A. Cancel claims 1--3.
- B. Delete claim 4 and replace claim 4 as follows;

Art Unit: 2628

Claim 4:

A computer-implemented method for determining fill styles for pixels in a scan line, the scan line comprising a first pixel having at least one edge, a second pixel without any edges, a third pixel having at least one edge, and a fourth pixel without any edges, the first, the second, the third, and the fourth pixels comprising being along a scan direction of the scan line, the method comprising:

for each edge in the first pixel:

determining if each edge touches a bottom border of the first pixel;

for each edge that touches the bottom border of the first pixel,

incrementing a first fill style parameter by a difference between a right fill style and a left fill style of the edge, wherein the leftmost fill style in the scan line is set to null;

incrementing a second fill style parameter by the first fill style parameter of the first pixel;

filling the second pixel with a first fill style equal to the second fill style parameter;

for each edge in the third pixel,

determining if each edge touches a bottom border of the third pixel;

for each edge that touches the bottom border of the third pixel,

incrementing a third fill style parameter by a difference between a right fill style and a left fill style of the edge;

incrementing the second fill style parameter by the third fill style parameter of the third pixel;

Art Unit: 2628

filling the fourth pixel with a second fill style equal to the second fill style parameter; and

displaying the second and the fourth pixels on a display device to a user.

C. Add the following claims:

Claim 5. The method of claim 4, wherein at least one pair of the first and the second pixels, the second and the third pixels, and the third and the fourth pixels does not comprise consecutive pixels in the scan line.

Claim 6. The method of claim 4, wherein at least one pair of the first and the second pixels, the second and the third pixels, and the third and the fourth pixels comprises consecutive pixels in the scan line.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

The amended version of claim 4 is allowable because the prior art of record does not include the idea of determining a fill style based on only crossing the bottom of a pixel, and further does not teach incrementing the fill style multiple times in a single scan line using the described algorithm in specific details with regards to incrementing the parameter in the specified manner.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Woods

June 21, 2006



MARK ZIMMERMAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600